WHAT IS CLAIMED IS:

1.   A golf ball having the diameter D of 43.0 mm or greater and 50.0 mm or less, which comprises a core and a cover having the specific gravity of 1.05 or greater and 1.50 or less, with the moment of inertia of said golf ball being equal to or greater than 85.0 gcm^2.

2.   The golf ball according to claim 1 wherein the moment of inertia is equal to or greater than 88.0 gcm^2.

3.   The golf ball according to claim 1 wherein the moment of inertia is equal to or greater than the value Y calculated by the following mathematical formula (I):
$$Y = 3.57 \cdot D - 68.6 \qquad (I).$$

4.   The golf ball according to claim 2 wherein the moment of inertia is equal to or greater than the value Y calculated by the following mathematical formula (I):
$$Y = 3.57 \cdot D - 68.6 \qquad (I).$$